

Ad-Wb/wb

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Method and Apparatus for Producing Instruction Words  
to Trigger Functional Units in a Processor

Abstract

The invention relates to a method and an apparatus for generating instruction words to trigger functional units in a processor, where a sequence of data-stationary commands occurs, deriving from a sequence of primary instruction words. Here the primary instruction words consist of several instruction word parts. The instruction word parts are each intended to trigger one functional unit.

According to the invention, in the working off of the instruction words, a reduction of memory outlay and an enhancement of operating speed are achieved in that the said partial words of a complex are assembled in a complex partial word sequence during a configuration phase and stored in a complex word table. The complex word sequence there deposited is read out, in an execution phase, from the row indicated by a complex word pointer in the complex word table. The complex words contained in it are stored parallelwise by the several assignments internal to the complex words in the corresponding row and column of the secondary instruction word memory, and after output to

the corresponding functional units in an instruction word output memory, are able to trigger the required functions.